

[MS-FILESYNC]:

File Synchronization Protocol

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Revision Summary

Date	Revision History	Revision Class	Comments
7/24/2018	0.1	New	Released new document.

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1 Introduction

The File Synchronization Protocol specifies the communication required between client to service to help replicate files stored on the service onto the local machine, and how to ensure the files are in sync with the service.

Sections 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

1.1 Glossary

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the [Errata](#).

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

1.2.2 Informative References

None.

1.3 Overview

For a client to replicate files on a service to a local machine, the client must be able to perform a set of different actions.

Typical scenarios for using this protocol is to start the initial sync of a collection of files and folders onto a local machine, and to ensure any changes made locally or on the service and are replicated onto the other endpoint.

This protocol documentation will go into the details of how a client can:

- Authenticate against the service
- Discover and locate file store locations on the service
- Obtain specific settings from the service
- Register for notifications on changes to the files in the service
- Upload and download of files to and from the service

1.4 Relationship to Other Protocols

1.5 Prerequisites/Preconditions

1.6 Applicability Statement

1.7 Versioning and Capability Negotiation

1.8 Vendor-Extensible Fields

1.9 Standards Assignments

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2 Messages

2.1 Transport

2.2 Common Data Types

2.2.1 Namespaces

2.2.2 HTTP Methods

2.2.3 HTTP Headers

2.2.4 URI Parameters

2.2.5 Elements

2.2.6 Complex Types

2.2.7 Simple Types

2.2.8 Attributes

2.2.9 Groups

2.2.10 Attribute Groups

2.2.11 Data Structures

2.3 Directory Service Schema Elements

3 Protocol Details

3.1 Client Details

GET https://sp.office.com/

Authenticate user against On premises SharePoint Server. There will be several back and forth requests and responses depending on the auth scheme being used.

GET https://sp.office.com/_api/sp.userprofiles.peoplemanager/getmyproperties

Gets properties of logged in user to determine my site URL. Gets a response as XML.

GET https://sp-my.office.com/personal/<useralias>/_api/web/DefaultDocumentLibrary/ID HTTP/1.1

Gets the relative path to user's my site.

GET https://sp-my.office.com/personal/<useralias>/_api/Site/Id HTTP/1.1

Gets the my site ID.

GET https://sp-my.office.com/personal/<useralias>/_api/SPFileSync/sync/be100e28-dd1c-4f2f-8e83-acdb6fffff05/policy/ HTTP/1.1

Gets the my site global client policy as an XML response.

GET https://sp-

my.office.com/personal/<useralias>/_api/SPFileSync/sync/be100e28dd1c4f2f8e83acdb6fffff05/policy/ HTTP/1.1

Gets the site specific client policy for the my site as an XML.

GET https://sp-

my.office.com/personal/<useralias>/_api/SPFileSync/sync/be100e28dd1c4f2f8e83acdb6fffff05/RootFolder HTTP/1.1

Get my site's root folder properties as an XML response.

Recursively get individual item properties and root folder quota state, e.g.:

- GET https://sp-my.office.com/personal/<useralias>/_api/SPFileSync/sync/be100e28dd1c4f2f8e83acdb6fffff05/Items/eb99ad0e96e64d1fb3547dff4fddbfa0?View=SkyDriveSync&Depth=0&FoldersOnly=true&web3s.paging=0,100 HTTP/1.1
- GET https://sp-my.office.com/personal/<useralias>/_api/SPFileSync/sync/be100e28dd1c4f2f8e83acdb6fffff05/RootFolder?web3s.expand=QuotaState

POST https://sp-

my.office.com/personal/<useralias>/_api/spfilesync/sync/be100e28dd1c4f2f8e83acdb6fffff05/Subscription HTTP/1.1

Subscribe to web push notifications from SharePoint Server for future changes.

3.1.1 Abstract Data Model

3.1.2 Timers

3.1.3 Initialization

3.1.4 Higher-Layer Triggered Events

3.1.5 Message Processing Events and Sequencing Rules

3.1.5.1 [Insert Resource Identifier here]

3.1.5.1.1 [Insert HTTP Method Name here]

3.1.5.1.1.1 Request Body

3.1.5.1.1.2 Response Body

3.1.5.1.1.3 Processing Details

3.1.6 Timer Events

3.1.7 Other Local Events

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4 Protocol Examples

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5 Security

5.1 Security Considerations for Implementers

5.2 Index of Security Parameters

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6 Appendix A: Full XML Schema

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7 Appendix B: Full JSON Schema

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8 Appendix C: Full CSDL

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9 Appendix D: WCF Contract

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10 Appendix E: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include updates to those products.

Microsoft SharePoint Server 2019 Preview

Exceptions, if any, are noted in this section. If an update version, service pack or Knowledge Base (KB) number appears with a product name, the behavior changed in that update. The new behavior also applies to subsequent updates unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms "SHOULD" or "SHOULD NOT" implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term "MAY" implies that the product does not follow the prescription.

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11 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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